

ABSTRACT

A motor control apparatus capable of expanding a voltage output and a modulating wave signal generating method for a PWM inverter apparatus of the motor control apparatus, which is controlled by a pulse width modulating signal obtained by comparing a modulating wave signal of a voltage instruction with a carrier wave are provided.

An upper limit value calculation unit 105 and a modulation wave limiter unit 4 are provided, and an upper limit value 14 of a modulating wave, which is equal to or smaller than the maximum value of the carrier wave and equal to or larger than the minimum value of the carrier wave is produced in the upper limit value calculation unit 105 and modulating wave instructions 13 for a plurality of phases are corrected by the modulation wave control unit 4 by using the upper limit value 14 of the modulating wave.